



“Best Practices Guidelines for Safely Conducting Hearing Testing During the COVID-19 Pandemic”

Richard Stepkin, M.S.- Chair; Raul Mirza, D.O.; Michael Zittle, D.O.; Carolyn Tolley, M.S.; Tim Rink, Ph.D.

A National Hearing Conservation Association (NHCA) Task Force with participation from the Council for Accreditation in Occupational Hearing Conservation (CAOHC); and Occupational Medicine Specialists.

NHCA initiated a Task Force for developing guidance to safely conduct hearing testing during the Coronavirus Disease (COVID-19) pandemic. The intent of this document is to provide a “Best Practices” guidance to Hearing Testing Professionals to help minimize their risk of SARS CoV-2 infection through person-to-person spread within occupational health clinics, company in-house testing and mobile test environments. Information within this document is based upon current knowledge, CDC guidance and common sense all of which are subject to change as we learn more about COVID-19.

This guidance is applicable to three types of hearing testing scenarios:

- 1) Mobile on-site services (multiple test stations) within a single test booth*
- 2) CAOHC trained company in-house testing without physician monitoring (single station testing) and mobile testing units using multiple single test booths*
- 3) Physician based free standing occupational health clinics (single station testing)*

Within these guidelines we reference NHCA Mobile Service Providers as PSPs; CAOHC Occupational Hearing Conservationists as OHCs and other physician based occupational health clinics as OCs. For the purpose of this document, Hearing Testers will be all inclusive (Audiologists, OHCs, Physicians) and referred to as “Test Professionals.” The term “employee” refers to hearing conservation program recipients who are subject to audiometric testing in accordance with Federal and state regulations.

1. Screening employees for COVID-19 symptoms and exposure:

- a.** Test Professionals should require employees to complete a COVID-19 health screening questionnaire prior to entry into the testing area. Non-English-speaking employees should have an interpreter or a translated questionnaire to ensure accuracy
- b.** The COVID-19 questionnaire should ask about current symptoms and COVID-19 exposures:
 - i.** Current symptoms:
 1. Fever of $\geq 100.4^{\circ}$ F
 2. Chills and/or shaking with chills
 3. Dry cough
 4. Difficulty breathing and/or shortness of breath
 5. Flu-like symptoms including fatigue and/or muscle aches
 6. Sore throat
 7. Loss of taste and/or smell



ii. Recent exposures:

1. Close contact with any person with probable or confirmed COVID-19 in the past 21 days

iii. Isolation by a healthcare provider within the last 14 days

1. If “yes”, employee must provide the Test Professional written verification from their healthcare provider that they have been medically released from isolation

c. If an employee answers “yes” to experiencing symptoms or to recently being isolated, this should be documented, and the employee should not be allowed in the testing area

- i. The employer should be notified, and the employee rescheduled for testing when cleared by their healthcare provider
- ii. The employee should be advised to consult with their regular healthcare provider if they are experiencing symptoms
- iii. If recently isolated, the employee should provide the Test Professional verification that they have been medically released from isolation

d. If “yes” to a close contact with probable or confirmed COVID-19, the employee should be advised to consult their healthcare provider and quarantine for 14 days

- i. The employee should not be allowed to complete testing until quarantine is complete.
- ii. This should be documented, the employer notified, and the employee rescheduled for testing when cleared by their healthcare provider

e. Signs (English and translated) should be posted stating that employees with respiratory symptoms and fever will be prohibited from entering the hearing testing area and completing their scheduled hearing test

2. Personal protective equipment (PPE) and other COVID-19 prevention strategies:

a. Test Professionals should adhere to the PPE guidance established by the Centers for Disease Control and Prevention (CDC) including strategies to optimize PPE use, e.g., extended use and reuse

b. Filtering Facepiece Respirator (FFR):

- i. N95 FFRs are preferred for the Test Professional
 1. Offers respirator protection from inhaling respiratory droplets containing SARS-CoV-2
 2. FFRs must fit snugly on the user’s face and should not be used with beards, other facial hair or conditions that prevent a good seal between the face and the sealing properties of the respirator



3. Additional CDC information on N95 filtration, fit and proper use
<https://blogs.cdc.gov/niosh-science-blog/2020/03/16/n95-preparedness/> also
<https://www.cdc.gov/niosh/npptl/FilteringOutConfusion.html>

c. Surgical-type face mask for the Test Professional

- i. Use if N95 FFRs are not available
 1. A disposable surgical-type ear-looped face mask designed to cover both the mouth and nose area may be used
 2. Can periodically be discarded and changed throughout the day
 3. Not the same as N95 FFR
 - a. Surgical face masks do not provide respiratory protection but do provide a physical barrier between the wearer and others
 - b. Surgical face masks are designed to block large drops of body fluids whereas N95 can block smaller droplets
- ii. Additional FDA information on comparison of N95 to surgical masks:
<https://www.fda.gov/medical-devices/personal-protective-equipment-infection-control/n95-respirators-and-surgical-masks-face-masks#s2>

d. Face cloth covering for the employee only:

- i. Not considered a PPE but is allowed by CDC in conjunction with social distancing
 1. Employee should maintain a 6-foot separation (where practicable) along with good respiratory and hand hygiene
 2. Should be well fitted over the bridge of the nose and down around the base of the chin
- ii. Additional CDC information on face cloth covering:
<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html>

e. Hand hygiene for both the Test Professional and employee:

- i. Hand washing:
 1. Hand washing is recommended prior to and following testing.
 - a. Establish a hand washing station convenient to the testing area using soap, hot water and paper towels
 - b. Hand washing should be for no less than 20 seconds covering both the front and back of hands and beneath the fingernails
 - c. If a hand washing station is not possible, use of a hand sanitizer is recommended ($\geq 60\%$ alcohol OR $\geq 70\%$ isopropanol)
 2. Additional CDC information on hand washing:
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/hand-hygiene.html>



- f. Protective Gloves for the Test Professional:
 - i. Protective gloves can be sterile or non-sterile (e.g. vinyl, latex or nitrile)
 - ii. Gloves should be sized for a comfortable fit
 - 1. Tight enough with no wrinkles or creases where contamination can hide
 - 2. No loosely fitted areas around the wrist
 - 3. Long or sharp fingernails may tear gloves reducing protection
 - iii. Gloves should be changed after each testing
 - 1. Hand sanitizer on gloves is not a best practice
 - iv. Gloves cannot be re-used after removing from hands
 - v. Additional CDC information on use and care of gloves:
<https://www.cdc.gov/handhygiene/providers/index.html>

- g. Eye protection for the Test Professional:
 - i. Face shields are a best practice
 - 1. Designed to protect the face, mouth, nose and eyes but must cover forehead, extend below the chin and wrap around the sides of the face
 - a. Used in conjunction with N95 FFR or surgical face mask
 - ii. Goggles can be used in place of face shields
 - 1. Must fit snugly over and around the eyes
 - iii. Personal glasses or contacts are not considered acceptable eye protection

- h. Workwear protection for the Test Professional:
 - i. Medical scrubs or company uniforms are recommended but not required
 - 1. Although it has not been determined which fabrics are most effective against virus contamination, materials with a greater proportion of cotton than polyester or nylon have been suggested
 - 2. Long sleeves may offer additional protection
 - 3. Freshly laundered workwear should be worn each day
 - 4. Workwear should not be worn outside the testing facility
 - 5. Machine wash workwear immediately after daily use

 - i. Additional CDC information on types and selection of PPE's:
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html>
<https://www.cdc.gov/hai/pdfs/ppe/ppeslides6-29-04.pdf>

CDC recommended strategies to optimize the supply of PPE and equipment:
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>



3. Cleaning and disinfection of hearing testing areas:

- a. Test Professionals should ensure the test environment is adequately cleaned and disinfected at all times utilizing a hospital grade disinfectant
- b. Ideal disinfectants include EPA-registered disinfectants that have qualified under EPA's emerging viral pathogens program for use against SARS-CoV-2
<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>.
- c. Outside booth areas frequently touched areas such as doorknobs, counter tops, chair and arm rests, desk surfaces, keyboards, phones, mice, clipboards, light switches, restrooms, booth glass and other communal areas should be routinely disinfected
- d. Interior booth areas frequently touched and having greater exposure to airborne particles such as glass windows, seats, partitions and hand switches should be disinfected after each test session. Spray disinfectant should be used on material (carpet-like) dividers and curtains
 - i. Ventilation time should be considered while disinfectant dries to eliminate any breathing, skin and eye irritation problems
- e. The Test Professional and employee must wash hands and/or use hand sanitizer before entering and leaving the testing area
- f. Additional CDC information about cleaning and disinfection can be found at:
<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>

4. PSP mobile unit testing multiple employees within a single test booth:

- a. Social distancing may not be possible but reducing the number of individuals tested at one time should be practiced
 - i. Consider testing $\leq 50\%$ of test booth capacity
 - ii. Consider spacing employees in an alternate or zig-zag layout and not physically opposite each other
 - iii. Dividers, curtains or protective screens are recommended between employees next to and opposite each other
 - iv. Require employees to wear face cloth covering
 - v. Monitor employees for coughing or sneezing
 1. If any employee starts coughing or sneezing, all employees must be immediately removed, and the test area disinfected

5. Protection for Test Professionals and employees inside the test booth:

- a. Clean and disinfect the test booth equipment after each test including the hand switches



- b. Optional: Use protective over-the-head and ears surgical type head covers not to be confused with a hair net
 - i. Bouffant style disposable sterile head covers may help maintain hygiene safety
 - 1. Head cover use may reduce need to clean earphones after every test
 - ii. Procure head cover sizes large enough (extra-large or 24”) to go over the head and ears
 - 1. The Test Professional should position the earphones over the employee’s covered ears to ensure proper placement
 - 2. Equipment calibration is not affected by head covers when earphones are properly positioned
 - 3. The Test Professional should remove earphones from around the employee head cover after testing to ensure they do not touch their face
 - 4. The employee should discard their head cover when leaving the test booth.
- c. Optional: Use protective individual earphone covers
 - i. Separate covers for each earphone
 - ii. Covers must be replaced after each test
 - iii. Ensure a good fit while wearing gloves
 - iv. Earphone placement without optional covers requires earphone cleaning after every test

6. Otoscopy sanitation

- a. The Test Professional should practice hand hygiene prior to and following each otoscopic exam
- b. Gloves should be worn during the exam
- c. Disposable speculums should be discarded after each exam and should not be reused
- d. Otoscope should be cleaned and disinfected after each use

Rev. 1 – May 6, 2020